U.S. Application No.: 09/874,313

REMARKS

In the present Amendment, Claim 1 has been amended to recite --A rewritable optical recording medium--. Support for this amendment can be found, for example, at page 6, lines 18-19 of the specification as originally filed.

Claim 1 has also been amended to recite that --the metal chalcogenide nanoparticles comprises at least one element selected from the group consisting of the elements of the groups 8 and 1B of the Periodic Table, at least one element selected from the group consisting of the elements of the 4th to 6th periods of the groups 3B, 4B and 5B of the Periodic Table and at least one element selected from the group consisting of the elements of the group 6B of the Periodic Table--. Support for this amendment can be found, for example, at page 8 of the specification, lines 15-24, in particular, examples AgInSbTe, AgInTe₂, AgSbTe₂, CuInSe₂, CuInTe₂ and AgSbTe, and working Examples 2 and 3.

Claim 3 has been canceled.

Entry of the Amendment is respectfully requested. Upon entry of the Amendment, Claims 1 and 5-13 will be all the claims pending in the application.

In Paragraph No. 4 of the Office Action dated January 6, 2004, Claims 1, 3 and 5-13 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Iida et al '961 in view of Murray et al, "Synthesis and Characterization of Nearly Monodisperse CdE...", J. Am. Chem. Soc., vol. 115(19), pp. 8706-8715.

In the Advisory Action dated July 21, 2004, the Examiner asserts that Iida et al. discloses a rewritable optical recording medium.

Applicants respectfully submit that the amended claims are patentable over Iida et al in view of Murray et al for at least the following reasons.

Iida et al discloses an optical disc comprising a shutter layer containing semiconductor fine particles (Abstract), wherein the shuttle layer is formed by dispersing at least one kind of semiconductor fine particles selected from the group consisting of CdS, CdSe, CdSSe, GaAs, amorphous Si, CdTe, CdSe, ZnO, ZnS, ZnSe, ZnTe, GaP, GaN, AlAs, AlP, AlSb and amorphous SiC, into a matrix of glass or resins (column 2, lines 61-66).

As noted above, Applicants have in the present Amendment amended Claim 1 to recite that the metal chalcogenide nanoparticles comprise at least one element selected from the group consisting of the elements of the groups 8 and 1B of the Periodic Table, at least one element selected from the group consisting of the elements of the 4th to 6th periods of the groups 3B, 4B and 5B of the Periodic Table and at least one element selected from the group consisting of the elements of the group 6B of the Periodic Table.

None of the semiconductor fine particles disclosed in Iida et al satisfies the above recitation. Further, Iida et al does not suggest the presently claimed metal chalcogenide nanoparticles. Still further, Murray et al does not rectify the deficiencies of Iida et al.

Accordingly, Applicants respectfully submit that the present invention is patentable over the cited references and that the rejection should be withdrawn.

In Paragraph No. 5 of the Office Action dated January 6, 2004, Claims 1, 3 and 5-13 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ichihara et al in view of JP 62-270386 to Ito and Iida et al, further in view of Murray et al, Synthesis and

Characterization of Nearly Monodisperse CdE...", J. Am. Chem. Soc., vol. 115(19), pp. 8706-8715, and JP 62-125550.

Applicants respectfully submit that the amended claims are patentable over the cited references for at least the following reasons.

Ichihara et al discloses producing metal chalcogenide nanoparticles by sputtering. A characteristic of Ichihara et al is that a particulate metal chalcogenide is formed in a matrix of TiO₂ or Zn-SiO₂ by cosputtering with a TiO₂ or Zn-SiO₂ target and a metal chalcogenide target. Thus, a thin film is formed as a whole (the particulate metal chalcogenide does not exist solely, but exists in the thin film).

If the thin film of Ichihara et al is crushed so as to be absorbed by a dispersing agent of JP '386, the size of the crushed materials would not be so small and size seems to be several hundred nm or more, at most. In addition, the dispersing agent of JP '386 would not exist on a back side of a metal chalcogenide, but would instead exist on a matrix of TiO₂ or Zn-SiO₂. This is different from the present invention.

The other cited references do not rectify the deficiencies of Ichihara et al in view of JP '386. Accordingly, Applicants respectfully submit that the present invention is not obvious over the cited references and that the rejection should be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 09/874,313

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 51,283

Fang Liu

SUGHRUE MION, PLLC

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

washington office 23373 customer number

Date: September 7, 2004